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| **Year 9 Term 6.1 - Maths** |  |
| **Enquiry Question:** **Why did the Ancient Greeks believe that the circle was the perfect shape?**  |
| **Unit title: Circles****Why now?** This unit builds on ideas about **area and perimeter of shapes** and **ratios** you first meet in **Year 8** in addition to **similarity** which you meet earlier this year in **Year 9.** The unit will explore the geometrical properties of circles, investigate a famous natural ratio, construct circles using geometrical equipment and use that new knowledge to understand how to find the area and perimeter of a circle and apply in context.  **In year 10**, we then build on circles further and apply these ideas to understand their link to creating **geometrical constructions** such as **perpendicular bisectors.** |
| **Knowledge**Students will know about… | **Application/Skills**Students will be able to… | **Vocabulary***(Tier 2 and 3)* | **Home** **Learning** | **Assessment** | **Extra Resources****Extended Reading** | **Cultural** **Capital** |
| 1. Parts of a circle
2. Drawing circles accurately
3. All about PI
4. Finding the circumference- and finding radius or diameter given circumference
5. Finding the area- and finding radius or diameter given area
6. Working with compound shapes involving circles and parts of circles
7. Problems involving circles
 | 1. Work in a team
2. Communicate using mathematical language with others.
3. Having a mathematical Conversation with other students
4. How to investigate a methematical idea
 | ***Tier 2***CompoundSegmentArea***Tier 3***DiameterCircumferenceChord Segment of a circleTangentIrrational Number | **Pre-classroom:**Pre-lesson tasks on **google classroom** to get you thinking.Diagnostic questions**Post-Classroom:**Post lessons online tasks:* My Maths
* Google Form Quizzes
* Independent learning notes
 | Formative assessment at the end of the units in their LPS books. This will be a combination of students presenting what they know in a creative way followed by some differentiated questions. Summative Assessment at the end of T2.  | **Enrichment:****Creative Constructions:**a. Create a piece of artwork with just a pair of compasses and a ruler. b. Construct a regular hexagon or a dodecagon using a pair of compasses and a straight edge..  |  Visit the Science Museum in Kensington and see some real-life constructions..  |
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